THERE IS CLAIMED:

1. A secure method of exchanging information messages sent successively from a sending platform to a receiving platform, which includes:

a) an initialization sequence in which an initialization message containing information relating to a date t_1 for sending a first information message M_1 is exchanged between said sending platform and said receiving platform so that said sending platform and said receiving platform then know said date t_1 for sending said first information message M_1, and

b) an information message transmission sequence in which:

- said information messages are sent successively by said sending platform at given time intervals ΔT_E with a sending time tolerance δ based on a clock specific to said sending platform, so that said first message M_1 is sent at said date t_1 on said clock and the nth message M_n is sent at the date $t_n = t_1 + (n-1).\Delta T_E + \delta$, each message M_n being coded by means of a dynamic code C_n specific to said date t_n of sending said message, and

- said messages received by said receiving platform are processed as a function of their reception date t_r based on a clock specific to said receiving platform so that said messages received in an observation window F_n in the vicinity of t_n are decoded using a decoding sequence DC_n adapted to decode said dynamic code C_n, said clock of said receiving platform being synchronized to said date t_1 on receiving said first message M_1.

2. The secure method claimed in claim 1 of exchanging information messages, wherein during said initialization sequence a) a coded initialization message M_0 is sent from said sending platform to said receiving platform and a coded initialization message M'_0 is sent

from said receiving platform to said sending platform, said initialization messages M_0, M'_0 containing the information relating to said date t_1 for sending said first information message M_1, and said initialization messages M_0, M'_0 being decoded by said sending platform and said receiving platform which then know said date t_1 for sending said first information message M_1.

3. The secure method claimed in claim 1 of exchanging information messages, wherein, if said first message M_1 is not received within an allotted time after reception of said initialization message, said clock of said sending platform is automatically synchronized to said date t_1 at the moment corresponding to the end of the allotted time.

4. The secure method claimed in claim 1 of exchanging information messages, wherein said observation window F_n corresponds to a time window $[t_1 + (n-1).\Delta T_E - \Delta T_F * \varepsilon, t_1 + (n-1).\Delta T_E + \Delta T_F * (1-\varepsilon)]$, where ΔT_F corresponds to the width of the observation window and satisfies the equation $\Delta T_F \leq \Delta T_E$ and ε is from 0 to 1.

5. The secure method claimed in claim 1 of exchanging information messages, wherein a clock synchronization signal is sent regularly by said sending platform between sending messages M_n, said synchronization signal being used to correct the frequency or the phase of the internal clock of said receiving platform dynamically in order to reduce the phase or frequency error between the internal clocks of said receiving platform and said sending platform.

6. The secure method claimed in claim 1 of exchanging information messages, wherein said information messages decoded by said receiving platform are transmitted to an information processing module.

7. The secure method claimed in claim 1 of exchanging information messages, said messages received

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by said receiving platform during an observation window F_n are stored sequentially in a memory able to store only one message at a time and only the message stored in said memory at the end of said observation window F_n is transmitted to said information processing module.

8. The secure method claimed in claim 1 of exchanging information messages, wherein said sending platform is part of a centralized control station of a rail traffic supervision and control system, said receiving platform is part of a fixed installation disposed alongside a rail track, and said information processing module is a control unit on board a train circulating on a track section associated with said fixed installation.